

DOCUMENT RESUME

ED 288 985

CE 048 001

AUTHOR Liming, Roxi A.; Warmbrod, Catharine A.
TITLE OPTIONS. Expanding Educational Services for Adults.
The Educator's Guide.
INSTITUTION Ohio State Univ., Columbus. National Center for
Research in Vocational Education.
SPONS AGENCY Office of Vocational and Adult Education (ED),
Washington, DC.
PUB DATE 87
GRANT G008620030
NOTE 54p.; For related documents, see CE 048 002-008.
AVAILABLE FROM National Center Publications, Box SP, National Center
for Research in Vocational Education, 1960 Kenny
Road, Columbus, OH 43210-1090 (Order No.
SP500A--\$5.25; complete OPTIONS set,
SP500--\$174.00).
PUB TYPE Guides - Classroom Use - Guides (For Teachers) (052)
EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Adult Education; *Adult Programs; *Career Change;
Career Guidance; Curriculum Development; Demography;
Educational Needs; Entrepreneurship; *Futures (of
Society); Job Training; Literacy Education;
Postsecondary Education; *Program Content; Program
Development; *Retraining; Special Programs;
Technological Advancement

ABSTRACT

This guide is intended to acquaint postsecondary-level administrators, instructors, and counselors with the background, philosophy, components, structure, and use of the OPTIONS program. The first section discusses recent and likely demographic changes that will affect postsecondary education and the work force. It explains the role of the OPTIONS program as a way of preparing workers for rewarding employment in a labor market subject to rapid, unpredictable changes caused by rapid technological advancement. Linking with employers and developing a curriculum in response to change are examined next. Adult career guidance, entrepreneurship education, and literacy enhancement for adults are covered in a section on special services for adult learners. Case studies of programs serving adults and guidelines for using OPTIONS are provided. A 6-page list of documents that have served as source materials in the development of the OPTIONS program are included along with a 17-page list of related readings dealing with linking with employers, developing curricula, and providing special services to adult learners. (MN)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

The Educator's Guide

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

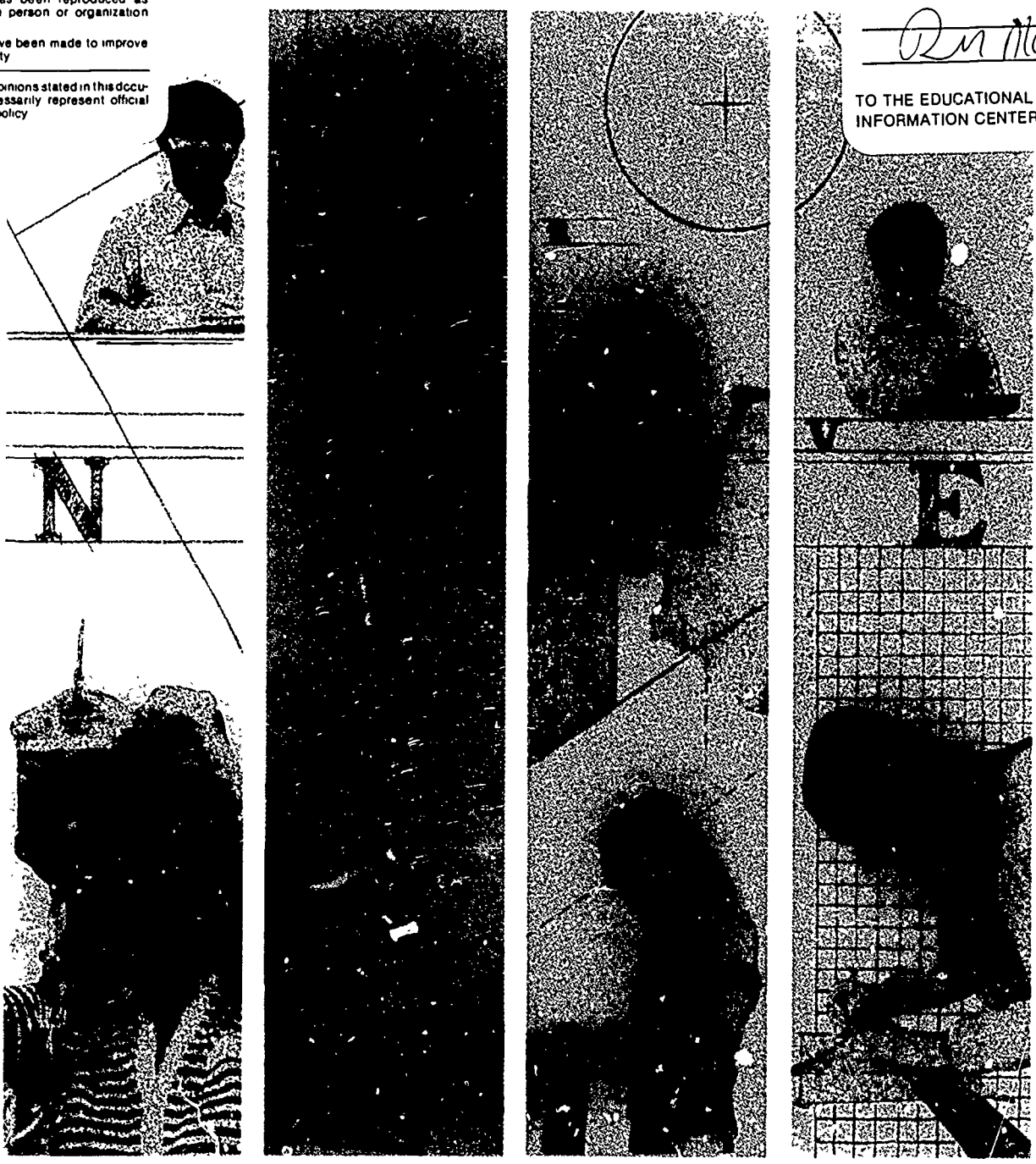
☒ This document has been reproduced as
received from the person or organization
originating it.
☐ Minor changes have been made to improve
reproduction quality.

Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.


"PERMISSION TO REPRODUCE THIS
MATERIAL IN MICROFICHE ONLY
HAS BEEN GRANTED BY

R. M. Morris

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)"



YPTIONS
Expanding Educational Services for Adults

 THE NATIONAL CENTER
FOR RESEARCH IN VOCATIONAL EDUCATION
THE OHIO STATE UNIVERSITY

THE NATIONAL CENTER MISSION STATEMENT

The National Center for Research in Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning, preparation, and progression. The National Center fulfills its mission by:

- Generating knowledge through research
- Developing educational programs and products
- Evaluating individual program needs and outcomes
- Providing information for national planning and policy
- Installing educational programs and products
- Operating information systems and services
- Conducting leadership development and training programs

For further information contact:

Program Information Office
National Center for Research in Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210-1090

Telephone: (614) 486-3655 or (800) 848-4815
Cable: CTVOCEDOSU/Columbus, Ohio
Telex: 8104821984

Copyright © 1987, The National Center for Research in Vocational Education, The Ohio State University. All rights reserved.

THE EDUCATOR'S GUIDE

Roxi A. Liming

Catharine A. Warmbrod

**The National Center for Research in Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210-1090**

1987

FUNDING INFORMATION

Project Title: National Center for Research in Vocational Education,
Applied Research and Development

Grant Number: G008620030

Project Number: 051BH60001A

**Act under Which
Funds Administered:** Carl D. Perkins Vocational Education Act.
P.L. 98-524, 1984

Source of Grant: Office of Vocational and Adult Education
U.S. Department of Education
Washington, D.C. 20202

Grantee: The National Center for Research in Vocational Education
The Ohio State University
Columbus, Ohio 43210-1090

**Acting
Executive Director:** Chester K. Hansen

Disclaimer: This publication was prepared pursuant to a grant with the Office of Vocational and Adult Education, U.S. Department of Education. Grantees undertaking such projects under government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official U.S. Department of Education position or policy.

**Discrimination
Prohibited:** Title VI of the Civil Rights Act of 1964 states: "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." Title IX of the Education Amendments of 1972 states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance." Therefore, the National Center for Research in Vocational Education Project, like every program or activity receiving financial assistance from the U.S. Department of Education, must be operated in compliance with these laws.

TABLE OF CONTENTS

FOREWORD	v
EXECUTIVE SUMMARY	vii
THE CHALLENGE FACING POSTSECONDARY EDUCATION	1
Demographic Changes That Affect Postsecondary Education	1
Demographic Changes That Affect the Work Force	1
Implications for Postsecondary Education	3
LINKING WITH EMPLOYERS	5
DEVELOPING CURRICULUM IN RESPONSE TO CHANGE	7
SPECIAL SERVICES FOR ADULT LEARNERS	9
Adult Career Guidance	9
Entrepreneurship Education	9
Literacy Enhancement for Adults	10
CASE STUDIES OF PROGRAMS SERVING ADULTS	11
USING OPTIONS	13
SOURCE DOCUMENTS	19
RELATED READINGS	25
Linking with Employers	27
Developing Curriculum in Response to Change	30
Special Services for Adult Learners	36

FOREWORD

Postsecondary education faces major challenges for the future if it is going to remain responsive to changes in the areas of demography, labor force, economy, and societal expectations. If postsecondary education is to remain relevant, new programs to meet changing technological needs must be developed; increased sensitivity to the changing age, sex, and ethnic composition of the student population must be demonstrated; more training designed for part-time participants and for disadvantaged groups must be offered; and increased cooperation between business and educational institutions must be achieved.

In order to provide postsecondary administrators, program planners, curriculum developers, counselors, and instructors with up-to-date, reliable information, the National Center has developed a packaged set of materials entitled *OPTIONS: Expanding Educational Services for Adults*. This package is the result of a major review and synthesis of the premiere appropriate materials available. Organized around three highly targeted issues, the *OPTIONS* package contains an educator's guide, a videocassette, three books, and three monographs.

This publication, *The Educator's Guide*, orients administrators, instructors, and counselors to *OPTIONS*--its background, philosophy, components, structure, and use. An accompanying videocassette discusses the issues and forces impacting on educational institutions serving adults and motivates postsecondary personnel to work for program success.

Linking with Employers provides a rationale for cooperative efforts with business and industry. This book describes procedures for establishing linkages and conducting programs such as co-op education, customized training, retraining and upgrading, apprenticeship, resource sharing, and economic development.

Developing Curriculum in Response to Change, prepares program staff to design and adapt curricula to conform to technological changes in the workplace and to meet the learning needs of adults. This book discusses the six-stage process of curriculum development: assessing needs, defining objectives, identifying resources, developing curriculum content, implementing the curriculum, and monitoring and evaluating implementation.

The three monographs enable counselors and instructors to establish and conduct special services to meet the learning and career needs of adult populations. *Adult Career Guidance* prepares counselors to provide intake, assessment, employability skill development, and career guidance to multicultural, handicapped, and older adults, as well as dislocated workers and women reentering the work force. *Entrepreneurship Education* provides models for planning and implementing an entrepreneurship education program for adults. *Literacy Enhancement for Adults* provides models for planning and implementing adult literacy programs.

Case Studies of Programs Serving Adults describes exemplary practices and programs that have successfully improved or expanded educational services for adults. This book integrates the three major foci of linking with employers, developing curriculum in response to change, and providing special services for adults.

The National Center wishes to acknowledge the leadership provided to this effort by Dr. Robert E. Taylor, recently retired Executive Director. Appreciation also is extended to the following individuals who served as a panel of experts in assisting staff in planning strategy, recommending document content, and critically reviewing drafts of the documents: Dr. Larry Hackney, Associate Dean of Counseling and Life Career Development, Macomb Community College; Dr. Ronald M. Hutkin, Vice President of Academic Affairs, North Dakota State School of Science; Dr. H. James Owen, President, Tri-Cities State Technical Institute; and Dr. Roger Perry, Vice President of Academic Affairs, Champlain College.

Special recognition is due to Roxi A. Liming and Catharine P. Warmbrod who prepared this publication. Recognition and appreciation are deserved by the following National Center Staff who played major individual roles in the development of the *OPTIONS* package: Richard J. Miguel, Associate Director for Applied Research and Development, and Catharine P. Warmbrod, Research Specialist 2 and Project Director, for leadership and direction of the project; Judith A. Samuelson, Research Specialist 2; James O. Belcher, Program Associate; Roxi A. Liming, Program Assistant; and David J. Kalamas, Graduate Research Associate, for synthesizing and developing the documents; and Monyeene Elliott, for her word processing expertise and dedication to a major typing endeavor. Appreciation is extended to Judy Balogh and her staff for providing final editorial review of the documents.

Chester K. Hansen
Acting Executive Director
The National Center for Research
in Vocational Education

EXECUTIVE SUMMARY

Postsecondary education faces major challenges for the future if it is going to remain responsive to changes in the demography, labor force, economy, and societal expectations. New programs to meet changing technological needs must be developed. Increased cooperation between business and educational institutions must be achieved. Postsecondary institutions must respond to the changing age, sex, and ethnic composition of the student population.

In order to help educators meet these challenges, the National Center for Research in Vocational Education has developed **OPTIONS: EXPANDING EDUCATIONAL SERVICES FOR ADULTS**. This coordinated set of resources assists administrators, program directors, counselors, department heads, and instructors to meet the educational needs of adults. The resource books and monographs in **OPTIONS** serve as active references that help postsecondary educators in the creation of new programs and services or expansion and improvement of current programs. These resources prepare postsecondary educators to create and optimize linkages with local employers, keep individual program curricula abreast of the latest technological changes, and provide counseling services appropriate to adults.

This publication, *The Educator's Guide*, orients administrators, instructors, and counselors to **OPTIONS**. The guide leads users through the various components in the resource package, illustrates their use, and shows how the various publications support and supplement each other.



The Challenge Facing Postsecondary Education

There is little question that the remaining years of the 20th century will be a time of rapid change. The economy, responding to the combined influences of technological change and foreign competition, is shifting from one based primarily on the production of goods to one based primarily on the exchange of information and services. At the same time, the workplace is expected to change significantly with some jobs becoming obsolete and technology altering how other jobs are performed. Changes in the demographic composition of the work force and the aging of the work force also will impact significantly upon training and retraining needs of workers.

In such a period of transition, it is difficult to know how best to prepare workers for rewarding employment in a future whose structure can only be dimly perceived. As difficult as the task is, it is essential that postsecondary instructors, counselors, curriculum developers, program planners, department heads, and administrators understand the key demographic factors of the 1990s and the year 2000. By assessing the impact of these factors, postsecondary educators can develop policies that will address the education and training needs of the work force of the future.

Demographic Changes That Affect Postsecondary Education

Perceptions of the traditional college student being 18-21 years old are quickly changing. The following data substantiates this change.

- Currently, one out of three college students is 25 years or older.
- In the next 10 years, the 18- to 21-year-old population in the United States will decline an additional 29 percent.
- By the year 2000, approximately 60 percent of the college population will be over 30 years of age. At least one-half of this group will be studying part-time.

- A 1982 College Board national study reported that 60 million persons, or one-half of the adult population 25 years of age or older, studied one or more topics during the preceeding year in a classroom setting.
- The National Center for Education Statistics reports that, each year, 20 percent of the adult population, or 24 million persons 25 years of age or older, enroll in classes offering coursework leading to a certificate or diploma.

Other demographic data that affect postsecondary education are as follows:

- The 1980 Census reported that 52 million out-of-school adults (age 18 and over) lack a high school diploma.
- Approximately 2.3 million adults pursue basic skills and high school equivalency programs each year.
- The U.S. Department of Education estimates that 15 percent of the work force is functionally illiterate. This translates into 25 million adults being functionally illiterate, with an additional

46 million adults who are not proficiently literate.

- Each year 750,000 to 1 million functionally illiterate youth graduate from high school.
- In the United States, 18 million persons aged 18 or older speak a language other than English in the home. Of these adults, 4 million do not speak English well or at all.

Demographic Changes That Affect the Work Force

Many demographic changes in the next 10 to 15 years will affect the composition of the work force. Some of these are detailed below.

- The proportion of the 16- to 24-year-old labor force will shrink from 30 percent in 1985 to 16 percent in the year 2000.
- Over 90 percent of those who will be working in 1990, and 75 percent of those who will be working in the year 2000, are already in the work force.
- By the year 2000, an estimated 5 to 15 million manufacturing jobs will be restructured.
- Between 2 and 3 percent of the work force--which is projected to reach about 135 million by the year 2000--may need to be retrained each year.
- Experts are saying that many people will need to be retrained 6 to 10 times in the course of their working lives.
- An estimated 29 percent of the net growth in the work force between 1985 and 2000 will be in minority groups.

- Women will account for about 63 percent of the new entrants into the labor force during the next 15 years.
- The National Alliance of Business estimates that by 1990, three out of four jobs will require some education or training beyond high school.

Other factors that affect the work force are as follows:

- Approximately \$30 billion a year is spent by the federal government on continuing education.
- Business and industries spend about \$30 billion to \$40 billion annually on educating and training their employees.
- State and local governments, non-profit organizations, and individuals spend an additional \$20 billion each year on continuing education and training.
- One in eight working Americans receives at least one formal training course each year.
- In the next 10 years, about 6 million more jobs are projected in the

most skilled occupation--executive, professional, and technical.

- In the next decade, only about 1 million new jobs are projected in the less-skilled and laborer categories.
- In the 5 years between 1979 and 1984, an estimated 11.5 million

people lost their jobs through plant closing, relocations, or technological innovations. An estimated 20 percent of those people need to improve their basic skills in reading, writing, mathematics, and communications if they are to find jobs with good chances for advancement.

Implications for Postsecondary Education

As changes in the population and labor force occur, and as skill level demands fluctuate as technology advances, postsecondary education must adapt. All of the demographic factors previously mentioned influence the types of workers who now, and in the future, are most likely to need vocational-technical education--new entrants, displaced workers, reentrants, or others. Some specific implications are as follows:

- With decreasing enrollments, postsecondary schools will be more aggressive in recruiting students who have usually been underrepresented: blacks, Hispanics, residents of aging central cities and rural areas, and older students.
- There will be a sharp rise in new student groups. Most notable among these will be adults who are 35 and older, women reentering the labor force, women currently holding part-time jobs, and men and women seeking to upgrade their skills and make midcareer changes.
- Educationally disadvantaged groups will comprise a larger percentage of postsecondary education's enrollment. This development implies that programs of remedial basic skill courses will be needed along with regular vocational/occupational skill courses.
- Curriculum changes will be needed to adjust for new technology, a

changing student population, and more part-time students.

- As sophisticated new technologies offer more efficient ways to accomplish certain tasks, many more companies are likely to offer employees opportunities for retraining and upgrading skill levels.
- An increase in tuition-aid programs and many more business-education joint enterprises are likely.
- Many adult workers will find themselves in obsolete jobs. They will need better information on available jobs and a better understanding of their aptitudes in order to be channeled effectively into new careers. This will place greater demands on adult career guidance systems.

The next few years will place many demands upon postsecondary education. It will be called upon to conduct traditional instruction, to help ensure that students have basic communication and computational skills, to play an expanded role in training the disadvantaged, and to retrain and upgrade more adult workers than ever before. The challenges are many and many program adjustments will be needed.

To help postsecondary educators meet these challenges, the National Center for Research in Vocational Education presents **OPTIONS: EXPANDING EDUCATIONAL SERVICES FOR ADULTS**. Over the past few

years, much research has been conducted on these issues. Often, practitioners do not have the time to read through volumes of materials in order to find specific solutions to these problems. **OPTIONS: EXPANDING EDUCATIONAL SERVICES FOR ADULTS** presents solutions to these challenges in a format that is easily accessible. Specific steps, procedures, and guidelines are presented that will help practitioners implement new programs and update existing programs to meet the needs of the workers of the future.

OPTIONS: EXPANDING EDUCATIONAL SERVICES FOR ADULTS consists of the following four books:

- *Linking with Employers*
- *Developing Curriculum in Response to Change*
- *Special Services for Adult Learners*

- *Case Studies of Programs Serving Adults*

In addition to these books, a videocassette and a publicity kit also are included in the **OPTIONS** package. The videocassette gives a quick overview of the challenges facing postsecondary education and orients viewers to the **OPTIONS** package. It is designed to motivate staff to work for improved programs that serve the needs of adults. The handy publicity kit contains art work, layouts, copy, and ideas to help in publicizing programs that serve adult students.

The following sections describe the books in the **OPTIONS** package and how they can help instructors, counselors, curriculum developers, program planners, department heads, and administrators plan and implement programs and services for adults.



Linking with Employers

Long-term success in linkage development requires effective planning, solid marketing strategies, superior organization, and timely provision of quality products and services. In short, it requires sound management of available resources--whether they be people, money, materials, or time. *Linking with Employers* provides detailed guidelines that help prospective and experienced linkers acquire the skills and knowledge necessary to manage an institution's linking efforts. These guidelines are based upon extensive research into the strategies of successful linking agents and their institutions.

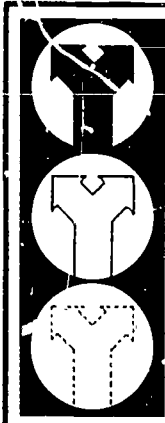
Part I, "An Introduction to Linkages," discusses business, industry, and labor leaders' needs, interests, and expectations. It creates an awareness of the many opportunities available for cooperative activity and an understanding of post-secondary education's role in economic development. Two individuals responsible for the management of large private enterprises present their views toward education and training in the United States. The perspectives of organized labor also are discussed.

Part II, "Building Linker Skills," describes the general skills needed by the individual chosen to fill the role of linking agent. The reader is provided with an outline of what the linking agent should know about the educational arena, the business, industry, and labor arena, organ-

izational development, interpersonal interaction, and the management of institutional resources. Self-assessment and self-development strategies are provided and will be useful to anyone assigned to or contemplating a linking role. Guidelines for developing and evaluating an institutional linkage plan and techniques for establishing linkages are provided. Special emphasis is placed upon the development of promotional materials.

Part III, "Taking Action," provides action guidelines for carrying through the linkage plans of an institution. The major focus is on customized or contract training and describes how to provide effectively the training and training-related products required and desired by business, industry, and labor. Guidelines for developing and maintaining cooperative education and apprenticeship programs also are provided. A summary of the many barriers to effective linkages and possible solutions to common linkage problems are included.

This comprehensive reference in an easy-to-use, three-ring binder provides positive guidelines and practical suggestions for establishing cooperative efforts with employers. This straightforward, factual, and informative reference will be useful to persons performing business and industry liaison responsibilities--administrators, department heads, program planners, instructors, and business-industry coordinators.



Developing Curriculum in Response to Change

If vocational-technical education is to remain relevant, educational institutions must be responsive to changes in technology used by business and industry. Processes for monitoring new and emerging skills must be refined. The procedures for modifying existing programs and developing new ones must be streamlined and made more efficient. Staff must be encouraged to keep their knowledge and skill levels up-to-date.

Developing Curriculum in Response to Change provides strategies that educators of adults can use to design and adapt curricula that meet the changing needs of the workplace and adults. It provides vocational-technical educators with an awareness of the magnitude of the challenge facing them. It stimulates interest in developing programs to meet the challenge, and it provides information on how to develop programs and curricula that respond to the needs of students as well as business and industry.

Part I, "The Challenge of Change," discusses the changing workplace and its effects on vocational-technical education. A discussion of how technology is altering the economy and social institutions is included. The effects that telecommunications, computer applications, and advanced manufacturing technologies have on labor demand and on occupations are reviewed and the future of vocational-technical education is explored.

An analysis of the ways that a vocational-technical institution can re-

spond to technological innovations is also presented in Part I. Strategies and processes used to identify emerging skills and the strategic long-range planning process also are discussed.

Part II, "Stages of Curriculum Development," describes six stages involved in the curriculum development process. These stages are as follows:

- Assessing needs
- Defining objectives
- Identifying resources
- Developing curricular content
- Implementing a curriculum
- Monitoring and evaluating implementation

Accurate appraisal of employer, curricular, and staff development needs is the first stage in the curriculum development process. A systematic approach to the process of reviewing employer and employee needs is outlined in Part II. In addition, a discussion of how a needs assessment can determine the difference between existing and desired levels of attainment in a program area is presented. The process and tasks involved in keeping teachers up-to-date are reviewed.

Defining objectives is the second stage in the curriculum development process. A description of how information can

be used to establish needs, goals, and objectives is presented. Two methods for establishing priorities, the fatal flaw analysis method and the feature analysis method, are described.

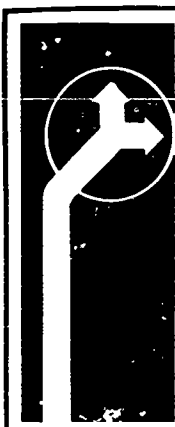
The third stage is identifying resources. A variety of information sources, their location, and their use are suggested. In addition, three small group techniques for gathering information are discussed.

The fourth stage is developing curricular content. A curriculum development model and the steps involved are outlined. The DACUM process and how it can be used in occupational analysis and curriculum development is discussed. Information about adult development theory, its implications for program development and instruction, and some practical guidelines for promoting adult student retention are given.

Implementing the curriculum is the fifth stage. The planning process for implementation is outlined and strategies for overcoming resistance to new programs or curricula are described. Six strategies for updating teacher skills also are analyzed.

Monitoring and evaluating implementation is the sixth stage. A description of program evaluation and how it is accomplished is presented. In addition, an outline for developing an evaluation system is included.

This planning guidebook outlines procedures for developing or adapting curricula. Packaged in a three-ring binder, it is a valuable reference for instructors, curriculum developers, and others who design and adapt curricula in response to changes in the workplace.



Special Services for Adult Learners

This collection of three books provides guidelines, recruitment strategies, client characteristics and needs, program planning and implementation approaches, and assessment strategies. Packaged in a convenient three-ring binder, these books will be useful to administrators, program planners, counselors, and instructors as they plan and implement the special programs

needed to serve adult students. Topics included in this collection are as follows:

- *Adult Career Guidance*
- *Entrepreneurship Education*
- *Literacy Enhancement for Adults*

Adult Career Guidance

This book provides important demographic information as well as program guidelines needed to effectively plan and implement programs geared to serving adults. Each chapter stresses the importance of realistic and thorough planning activities that take into account the characteristics and needs of the major adult populations now enrolling in postsecondary educational programs.

Program planners and counselors can use this information to develop programs that serve the needs of dislocated workers, displaced homemakers, women reentering the work force, displaced farmers, handicapped adults, multicultural adults, and older adults.

Entrepreneurship Education

This book describes the characteristics of entrepreneurs and the specific planning information needed by the entrepreneurship education program developer. An important feature of this book is its wealth of curriculum and organizational resource listings, which are designed to enable the program developer to tap into the emerging entrepreneurship networks.

Topical areas included in *Entrepreneurship Education* include the following:

- Establishing program goals and objectives
- Locating support services and facilities
- Budgeting

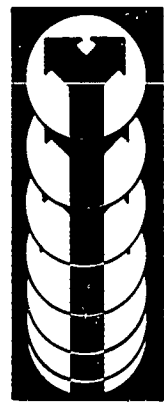
- Obtaining funding
- Marketing the program
- Selecting an advisory committee
- Evaluating the program

Literacy Enhancement for Adults

This book provides detailed information concerning the characteristics and the educational needs of illiterate and semi-literate adults. Strategies for remediation are provided along with discussions of resource materials and assessment instruments.

The second part of this book focuses exclusively on the limited English-

proficiency (LEP) client. Vital demographic and cultural information is provided to sensitize the program planner and the instructor to the needs and abilities of limited English-proficient students. This part of the book is designed to facilitate the planning and implementation of a bilingual vocational education program.



Case Studies of Programs Serving Adults

This comprehensive resource describes successful programs that have improved or expanded services for adults. Organized in a three-ring binder for quick, easy reference, this book illustrates how educational institutions can plan, implement, and conduct programs that meet the needs of adult students. These 61 different case studies describe a variety of programs, in various stages of development, at both established and developing institutions.

These case studies are helpful in numerous ways. They serve as idea sources and help educators of adults find solutions to existing needs. They provide examples of successful programs that can be easily adapted. Insights are provided into the processes that these institutions have used in developing programs. Case studies serve as motivators to administrators and faculty to set new goals for programs. They also help educators verify that current program goals and operating methods are in line with the current trends in postsecondary education.

Case Studies of Programs Serving Adults is divided into four parts with each part organized around a central theme. Each part is then separated into sections that focus on specific topics.

Part I, "Case Studies of Services for Employers and Their Workers," discusses postsecondary linkages with employers in order to provide services to workers. Section 1 focuses on customized training and retraining programs and how postsecondary institutions have responded to indus-

try's needs. Section 2 describes several literacy programs that are sponsored by major corporations and offered through postsecondary institutions. Section 3 describes how different postsecondary institutions are involved in their local communities' economic development efforts.

Part II, "Case Studies of Programs for Organized Labor," discusses organized labor's educational offerings to workers. Section 4 focuses on both long-term and short-term education and training programs offered through unions. The cooperative effort that exists between postsecondary institutions and industry in offering apprenticeship training programs is described in Section 5.

Part III, "Case Studies on Industry-Education Joint Ventures," focuses on collaboration between industry and education. Section 6 discusses industry and education's roles in establishing and developing high technology programs. Section 7 describes the cooperation that exists between education and industry in providing cooperative education programs for students and return-to-industry programs for faculty.

Part IV, "Case Studies of Special Services and Programs for Adults," focuses on postsecondary institutions' responses to students with special needs. Section 8 describes programs developed to serve dislocated workers. Section 9 discusses programs for persons with disabilities. Section 10 describes different programs, some operated at the college level and some

operated in cooperation with industry, for improving occupationally related basic skills.

Each case study provides a brief description of the program and how it

operates. Where possible, the case study describes funding and staffing patterns and the reasons that a program was initiated. Linkages with employers and other institutions also are detailed.



Using Options

OPTIONS: EXPANDING EDUCATION SERVICES FOR ADULTS is designed for one purpose: helping postsecondary institutions make existing structures flexible and responsive to diverse student populations. Establishing linkages with employers, developing and updating curricula, and providing special services for adult learners are three important ways that postsecondary institutions can achieve this goal.

Although each book in OPTIONS is based on a specific topic, the four books supplement and support each other. Users of this material will find helpful and practical guidelines relevant to specific topical or program areas in one or more publication. In addition, a variety of programmatic options are discussed that can be adapted to an institution's specific needs.

For example, assume that XYZ Community College has assessed its and the local community's needs, resources, and goals. XYZ Community College has decided that it must strengthen its customized training and retraining department in order to provide more effective services to business and industry. By using the resources available in OPTIONS, XYZ Community College's administrators, instructors, and business and industry coordinators can discover ways to achieve its goal.

First, persons concerned with linkages should read *Linking with Employers*

and, in particular, read the following chapters:

- Chapter 1, "Business and Industry Perspectives"
- Chapter 4, "The Effective Linker"
- Chapter 5, "Developing a Linkage Plan"
- Chapter 6, "Techniques for Establishing Linkages"
- Chapter 7, "Providing Customized Training"
- Chapter 10, "Dealing with Business and Industries' Barriers to Linkages"

After reading this material and assessing the current program's strengths and weaknesses, those involved with the customized training and retraining programs should read sections one and three in *Case Studies of Programs Serving Adults*. These case studies give XYZ Community College some specific models on which it may want to base its program.

When XYZ Community College develops its linking strategy, those involved with the customized training program should refamiliarize themselves with the curriculum development process. Specifically, they should read chapters three through eight in *Developing Curriculum in Response*

to Change. Because many of the trainees may need special services, they also should familiarize themselves with the special services they might provide by reading chapters one and two in *Adult Career Guidance* and chapters one through five in *Literacy Enhancement for Adults*.

In another example, suppose that ABC Technical Institute has been asked by a major employer to develop a literacy program for its workers. The representatives of ABC Technical Institute first should read chapters one through five in *Literacy Enhancement for Adults*. These chapters' topical areas are as follows:

- Characteristics of illiterate adults
- Literacy competencies for work
- Assessing students' basic skills
- Providing remedial instruction
- Guidelines for program development

After ABC Technical Institute's representatives have an understanding of the issues and programming options, they should read sections two and ten of *Case Studies of Programs Serving Adults* for specific examples of successful programs.

In addition, ABC Technical Institute's representatives should read chapters three through eight in *Developing Curriculum in Response to Change* in order to develop appropriate instructional methods and materials. The representatives also should become familiar with the information in chapters one and three of *Adult Career Guidance*: "Implementing Adult Intake and

Assessment" and "Providing Career Guidance for Multicultural Adults."

In a third example, assume that RST Vocational-Technical Institute is located in an area with a high unemployment rate. The administrator of the institute has been asked to sit on a local economic development board and will be representing the institute. To help the administrator analyze his or her role, the administrator should read chapters three and ten in *Linking with Employers*: "The Two-Year College and Economic Development" and "Dealing with Business and Industries' Barriers to Linkages." The administrator also should read section three of *Case Studies of Programs Serving Adults* to find out more about other institutions' roles in economic development activities. Plus, all of the information in *Entrepreneurship Education* will be of use to an institution wanting to provide a program that will help local economic development efforts.

The following matrix is designed to help readers use the OPTIONS resources effectively. The matrix highlights those sections or chapters of the various books that relate to specific programming options, such as customized training and retraining programs, apprenticeship programs, high technology programs, and so forth. Each reader approaches the information in the OPTIONS resources from a different perspective and with different needs; therefore, different sections will be of various interest and usefulness to each reader. The sections recommended in the matrix should be used as starting points for the reader. The reader is encouraged to review other sections within the OPTIONS material, in addition to the material recommended in the matrix.

Program Areas

Books in OPTIONS

	<i>Customized Training and Retraining Programs</i>	<i>Industrial Literacy Programs</i>	<i>Economic Development Programs</i>	<i>Education and Training Programs for Organized Labor</i>	<i>Apprenticeship Training Programs</i>	<i>High Technology Programs</i>
Linking with Employers	Chapters 1, 4, 5, 6, 7, and 10	-----	Chapters 3 and 10	Chapters 2, 7, and 10	Chapters 2, 8, and 11	-----
Developing Curriculum in Response to Change	Chapters 3 - 8	Chapters 3 - 8	-----	Chapters 3 - 8	Chapters 3 - 8	Chapters 1 - 8 Append. A - D
Special Services for Adult Learners						
• Adult Career Guidance	Chapters 1 and 2	Chapters 1 and 3	-----	Chapters 1 and 2	Chapters 1 and 2	-----
• Entrepreneurship Education	all	-----	all	-----	-----	-----
• Literacy Enhancement for Adults	Chapters 1 - 5	Chapters 1 - 5	-----	Chapters 1 - 5	Chapters 1 - 5	-----
Case Studies of Programs Serving Adults	Sections 1 and 3	Sections 2 and 10	Section 3	Section 4	Section 5	Section 6

Program Areas

Books in OPTIONS

	<i>Cooperative Education Programs</i>	<i>Faculty Return-To-Works Programs</i>	<i>Dislocated Worker Programs</i>	<i>Programs for Persons with Disabilities</i>	<i>Programs for Improving Occupationally Related Basic Skills</i>	<i>Programs for Multicultural Adults</i>
Linking with Employers	Chapters 9 and 10	-----	-----	-----	-----	-----
Developing Curriculum in Response to Change	-----	Chapter 7	Chapters 3 - 8	Chapters 3 - 8	Chapters 3 - 8	Chapters 3 - 8
Special Services for Adult Learners						
• Adult Career Guidance	-----	-----	Chapters 1 and 6	Chapters 1 and 5	Chapters 1 and 2	Chapters 1 and 3
• Entrepreneurship Education	-----	-----	all	-----	-----	-----
• Literacy Enhancement for Adults	-----	-----	Chapters 1 - 5	-----	Chapters 1 - 5	Chapters 1 - 5
Case Studies of Programs Serving Adults	Section 7	Section 7	Sections 8 and 3	Section 9	Sections 10 and 2	-----

Program Areas

Books in OPTIONS

	<i>Programs for Older Persons</i>	<i>Programs for Dislocated Farmers</i>	<i>Programs for Displaced Homemakers</i>			
Linking with Employers	-----	-----	-----			
Developing Curriculum in Response to Change	Chapters 3 - 8	Chapters 3 - 8	Chapters 3 - 8			
Special Services for Adult Learners						
• Adult Career Guidance	Chapters 1 and 4	Chapters 1 and 7	Chapters 1 and 8			
• Entrepreneurship Education	-----	-----	-----			
• Literacy Enhancement for Adults	Chapters 1 - 5	Chapters 1 - 5	Chapters 1 - 5			
Case Studies of Programs Serving Adults	-----	-----	-----			

SOURCE DOCUMENTS

The information in *OPTIONS: EXPANDING EDUCATIONAL SERVICES FOR ADULTS* has been excerpted and adapted from a variety of previously published documents. The reader is encouraged to review these source documents in order to obtain additional information regarding the subject areas discussed in each book.

Abram, Robert; Ashley, William; Faddis, Constance; and Wiant, Allen. *Preparing for High Technology: Programs That Work*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.

Abram, Robert; Ashley, William; Hoffmann, Robert; and Thompson, Jack W. *Preparing for High Technology: CAD/CAM Programs*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.

Abram, Robert; Rose, Bill J.; and Landrum, Bertha. *Preparing for High Technology: 30 Steps to Implementation*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.

Ashley, William; Abram, Robert; Konopka, Edward; and Carrico, Lloyd R. *Preparing for High Technology: Robotics Programs*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.

Ashley, William L., and Zahniser, Gale L. *Helping the Dislocated Worker: Sample Programs*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.

Ashmore, Cathy. "A Case for Entrepreneurship Education." *Career Training* (Spring 1986): 14-18.

Balogh, Judy; Ashmore, M. Catherine; Ross, Novella; Bebris, John; Fischer, Lisa Mazzei; and Baker, Phyllis. *Beyond a Dream: An Instructor's Guide for Small Business Exploration*. Leadership Training Series no. 68. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1985.

Barsch, Jeffrey. "Community College: New Opportunities for the LD Student." In *Yearbook of Special Education 1980-81. Sixth Edition*, by Glen R. Thompson, contributing editor. Chicago: Marquis Academic Media, 1980.

Bhaerman, Robert; Fitch, Brian; Goldwair, William; Lankard, Bettina; Pritz, Sandra; and Zahniser, Gale. *Apprenticeships in Employment and Training Programs: An Action Planning Guidebook*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1981.

- Bhaerman, Robert; Belcher, James; and Merz, Harold. *A Helping Hand: A Guide to Customized Support Services for Special Populations*. Bloomington, IL: Meridian Education Corporation, 1986.
- Burkhauser, Richard V.; Doescher, Tabitha A.; Sheppard, N. Alan; Turner, John A.; and Warlick, Jennifer L. *Retirement Policy: Planning for Change*. Edited by Kathryn H. Anderson. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.
- Campbell, Robert E., and Sechler, Judith A. *Adult Literacy Skills Required for Training for the Workplace*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- Darkenwald, Gordon G. *Retaining Adult Students*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1981.
- Deems, Richard S. *Career Development in Adult Basic Education Programs*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.
- Denniston, Denie. *Older Workers: What Voc Ed Can Do*. Information series no. 256. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.
- Doty, Charles. *Preparing for High Technology: Model Programs in the USA*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1985.
- Edwards, Kenneth, R. *The Perspective of Organized Labor on Improving America's Productivity*. Occasional Paper series no. 89. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.
- Elliman, Peter J. *Critical Issues in Vocational Education: An Industrialist's View*. Occasional Paper series no. 95. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.
- The Entrepreneurship Education Forum*. Proceedings of the conference September 21-22, 1983. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983. (Unpaged)
- Faddis, Constance; Ashley, William L.; and Abram, Robert E. *Preparing for High Technology: Strategies for Change*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.
- Fingeret, Arlene. *Adult Literacy Education: Current and Future Directions*. Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education, The National Center for Research in Vocational Education, The Ohio State University, 1984.
- Frey, Donald N. *The Economy, Productivity, and Training--A CEO's View*. Occasional Paper series no. 88. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.

- Friedenberg, Joan, and Bradley, Curtis. *Bilingual Voc Ed*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- Friedenberg, Joan E.; Lucas, Nancy Lee; Kremer, Nick; and Reed, Tipawan. *Immigrant Workers and the American Workplace: The Role of Voc Ed*, edited by Jeanne Lopez-Valadez. Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education, The National Center for Research in Vocational Education, The Ohio State University, 1985.
- Hamilton, James B., and Wonacott, Michael E. *Updating Teachers for Tomorrow's Technology: A Strategy for Action*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- Hull, William L.; Fields, Ernest L.; and Sechler, Judith A. *Industrial Literacy Programs: Final Project Report*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1986.
- Hull, William; Fields, Ernest; and Sechler, Judith. *Adult Literacy: Industry-Based Training Programs*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, forthcoming.
- Humbert, Jack T., and Woloszyk, Carl A. *Cooperative Education*. Information series no. 254. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.
- Kowle, Carol P.; Smink, Jay; and Stank, Peg. *Problem-Solving Process: A Planner's Handbook for Program Improvement*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.
- Lankard, Bettina A. *Providing Employability Skill Development*. Module CG C-8 of Category C--Implementing. Wooster, OH: Bell & Howell Publication Systems Division, 1985.
- Lemons, C. Dale. *Education and Training for a Technological World*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- Long, James P.; Gordon, Robert A.; Spence, Charles; and Mohr, Gary. *Economic Development and the Community College*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- MacKenzie, John R. *Organized Labor Education and Training Programs*. Information series no. 286. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- Mahoney, James R. *Community College Centers for Contracted Programs*. Washington, DC: American Association of Community and Junior Colleges, 1982.

- McDavis, Roderick T., and Parker, Woodrow M. *Help Ethnic Minorities with Career Guidance*. Module CG C-15 of Category C--Implementing. Wooster, OH: Bell & Howell Publication Systems Division, 1985.
- Merriam, Sharan B. *Adult Development: Implications for Adult Education*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- Nasman, Leonard O. *A Model to Assess the Education and Training Needs of Business, Industry, and Labor*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1981.
- Nelson, Orville, and Halfin, Harold. *Emerging Skills: Implications for Voc Ed*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.
- Norton, Robert E.; Hamilton, James B.; Harrington, Lois G.; Quinn, Karen M.; and Miller-Beach, Audni. *Direct Curriculum Development*. Athens, GA: American Association for Vocational Instructional Materials, 1983.
- Norton, Robert E.; Hamilton, James B.; Harrington, Lois G.; Greer, David R.; and Quinn, Karen M. *Direct Program Evaluation*. Athens, GA: American Association for Vocational Instructional Materials, 1983.
- Norton, Robert E.; Kowle, Carol P.; Harrington, Lois G.; and Spencer, Carol J. *Use Information Resources to Help Improve Vocational Education Programs*. Athens, GA: American Association for Vocational Instructional Materials, 1983.
- Norton, Robert E.; Spencer, Carol J.; Samuelson, Judith A.; Smink, Jay; and Harrington, Lois. *Use Inquiry Skills to Help Improve Vocational Education Programs*. Athens, GA: American Association for Vocational Instructional Materials, 1983.
- Norton, Robert E., and Belcher, James O. *A Guide to Linkages between Vocational Education and Organized Labor in the United States*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- Norton, Robert E.; Harrington, Lois G.; and Spencer, Carol J. *Develop a Linkage Program*. Competency-Based Vocational Education Administrator Module Series, module LT-J-1. Athens, GA: American Association for Vocational Instructional Materials (AAVIM), 1984.
- Norton, Robert E.; Harrington, Lois G.; Spencer, Carol J. *Establish Linkages with BIL/GM*. Competency-Based Vocational Education Administrator Module Series, module LT-J-2. Athens, GA: American Association for Vocational Instructional Materials (AAVIM), 1984.
- Norton, Robert E.; Harrington, Lois G.; and Spencer, Carol J. *Providing Customized Training Programs for BIL/GM*. Competency-Based Vocational Education Administrator Module Series, module LT-J-3. Athens, GA: American Association for Vocational Instructional Materials (AAVIM), 1984.

- Norton, Robert E. *DACUM Handbook*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1985.
- "A Plan for Entrepreneurship Education in Illinois." A paper presented by the Illinois Task Force on Entrepreneurship Education, 1984.
- Ross, Novella, and Kurth, Paula. *Model Entrepreneurship Programs*. Revised 1986. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1986.
- Ross, Novella; Park, Ciritta B.; Whittier, Sally; and Ashmore, Cathy. *Entrepreneurship Education and the Carl D. Perkins Vocational Education Act of 1984*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, forthcoming.
- Ruff, Richard; Shylo, Bruce; and Russell, Jill Frymier. *Vocational Education: A Look into the Future*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1981.
- Samuelson, Judith; Smink, Jay; Makin, Richard C.; and Wonacott, Michael E. *The Unfinished Agenda: An Implementation Guide*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1985.
- Sheppard, N. Alan. *Educational Opportunities for Older Persons: A Review*. Information series no. 170. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1979.
- Starr, Harold; Merz, Harold; and Zahniser, Gale. *Using Labor Market Information in Vocational Planning*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.
- Sticht, Thomas G., and Mikulecky, Larry. *Job-Related Basic Skills: Cases and Conclusions*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- Sullivan, William F. "Application of Job Placement and Follow-up in Vocational Education." In *Vocational Rehabilitation in Employment Training*, edited by Pamela Finnerty-Fried and Robert Ianacone. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- Vetter, Louise; Hull, William L.; Putzstuck, Christine; and Dean, Gary J. *Adult Career Counseling: Resources for Program Planning and Development*. Bloomington, IL: Meridian Education Corporation, 1986.
- Warmbrod, Catharine P., and Faddis, Constance R. *Retraining and Upgrading Workers: A Guide for Postsecondary Educators*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.

- Warmbrod, Catharine P.; Persavich, Jon J.; and L'Angelle, David. "Descriptions of Model Exemplary Programs in Apprenticeship Training." In *Sharing Resources: Post-secondary Education and Industry Cooperation*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1981.
- Wegmann, Robert G. *Reemployment Assistance for Laid-Off Workers*. Information series no. 258. Columbus: The ERIC Clearinghouse on Adult, Career, and Vocational Education, The National Center for Research in Vocational Education, The Ohio State University, 1983.
- Wonacott, Michael E., and Hamilton, James B. *Updating Teachers for Tomorrow's Technology: Programs & Practices*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.
- Zahniser, Gale L., and Ashley, William L. *Helping the Dislocated Worker: Planning Community Services*. Research and Development series no. 243A. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- Zahniser, Gale; Ashley, William L.; and Inks, Lawrence W. *Helping the Dislocated Worker: Employer and Employee Perceptions*. Research and Development series no. 243D. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1985.

RELATED READINGS

Much information has been written in recent years on the subjects of linking with employers, developing curricula, and providing special services to adult learners. The following lists are provided to assist the reader in locating this information if additional references are desired.

Linking With Employers

- Alfred, R. L. "Socioeconomic Impact of Two-Year Colleges." *ERIC Junior College Resource Review* (March 1980): 1-4.
- American Federation of Labor-Congress of Industrial Organizations. *AFL-CIO Structure Chart*. Washington, DC: AFL-CIO, 1984.
- Barton, P. E. *Worklife Transitions: The Adult Learning Connection*. New York: McGraw-Hill, 1982.
- Blake, L. J. "Up Front in Economic Development." *Community and Junior College Journal* 52, no. 3 (November 1981): 16-17. (ERIC No. EJ 258 286)
- Bolino, A. C. *Productivity: Vocational Education's Role*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1981.
- Brown, G. C. "Strategic Planning in an Urban Environment: Focus on Education." Developed for Cuyahoga Community College, Cleveland, Ohio, 1982. (ERIC Document Reproduction Service No. ED 216 739)
- "Businesses Spending More on Training Than Colleges and Universities Combined." *Illinois Economic Progress* 1 (January 1982): 3.
- Carnegie Council on Policy Studies in Higher Education. *Three Thousand Futures: The Next Twenty Years for Higher Education*. San Francisco: Jossey-Bass, 1980.
- Carnevale, A. "Human Capital: The Future for Private Training." *Training and Development Journal* 36 (January 1982): 41-44, 46-48.
- Choate, P. *Retooling the American Work Force: Toward a National Training Strategy*. Washington, DC: Northeast-Midwest Institute, 1982.
- Clayton, G. E. *Worker Productivity: A Challenge for Vocational Education*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.
- Connor, P. E. *Organizations: Theory and Design*. Chicago, IL: Science Research Associates, 1980.
- Denker, J. *Successful Adult Workers' Education Programs*. Topic Paper no. 4. Washington, DC: Labor Education Advisory Services, 1982.
- Fidler, T. A. "Advancing Community College Impact Through Business and Industry." *New Directions for Community Colleges* 10, no. 2 (June 1982): 21-34. (ERIC No. EJ 266 034)
- Garrison, D. C., and Korim, A. S. "Toward a National Policy for Human Resource Development and Economic Renewal." *Community and Junior College Journal* 52, no. 7 (April 1982): 9-11. (ERIC No. EJ 263 498)

- Glover, R. W. *Apprenticeship in the United States: Implications for Vocational Education Research and Development*. Occasional Paper no. 66. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1980.
- Goodman, R. *"Free Training": Special For-Industry State Subsidized Job Training Programs in Two States*. Washington, DC: National Institute of Education, 1980.
- Hemmings, M. *Vocational Education: A Tool for Business*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.
- Huddleston, K. F. *If Productivity is the Problem . . .* Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.
- Jones, S. W., and Beck, P. M. "On the Bricks: Partners in Progress." *Community and Junior College Journal* 53, no. 4 (December-January 1982-83): 24-26. (ERIC No. EJ 273 054)
- Labor-Involved Services for Displaced Workers: Program Models*. Washington, DC: AFL-CIO Human Resources Development Institute, 1983.
- Leach, J. *Reindustrialization: Implications for Voc Ed*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.
- Lecht, L. *Vocational Education as a Participant in the Economic Development Enterprise: Policy Options for the Decade Ahead*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1981.
- Levine, H., and Hutton, C. "Financing Labor's Role in Education and Training." *New Directions for Experimental Learning* no. 10 (1980): 75-84. (ERIC No. EJ 244 057)
- Lund, D. *The Role of Vocational Education in the Economic Development of Rural Areas*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1980.
- Lusterman, S. *Education in Industry*. NY: The Conference Board, 1977.
- MacRoy, C. R. "Community Colleges: A Natural Link between Industry and Education." *Journal of Industry-Education Cooperation* 2, no. 2 (1981): 41-45.
- Moore, G. R. "Short-Term Training--Where the Action Is." Salem, OR: Developed for Chemeketa Community College, Oregon, 1982. (ERIC Document Reproduction Service No. ED 226 789)
- Parnell, D. *National Human Resource Development Policy: The Role of Postsecondary Vocational Education*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.
- Pauli, K. K., and Carlos, E. A. *Vocational Educator's Handbook for Economic Development*. Arlington, VA: American Vocational Association, 1981.

- Rogers, A., and Shore, J. *Making Tuition Aid Work for You: An Action Guide for Managers, Labor Officials, Workers and Educators*. Worker Education and Training Policies Project. Washington, DC: National Institute for Work and Learning, 1980. (ERIC Document Reproduction Service No. ED 200 726)
- Ross, R., and Ross, M. *Relating and Interacting: An Introduction to Interpersonal Communications*. Englewood Cliffs, NJ: Prentice-Hall, 1981.
- Rudelius, W.; Erickson, W.; Bakula, W., Jr.; and Hanson, J. *An Introduction to Contemporary Business*. 3rd ed. New York: Harcourt Brace Jovanovich, 1981.
- Saul, W. E. "A BIG Program for Adult Outreach." *School Shop* (April 1979): 72-73.
- School Shop*. 42 (April 1983). Entire issue devoted to the theme of vocational-technical education linkages with industry.
- Schwartz, G. G., and Coate, P. *Being Number One: Rebuilding the U.S. Economy*. Lexington, MA: D.C. Heath and Company, Lexington Books, 1980.
- Short, C., and Levine, J. *The Neglected Resources: The Use of Employment and Training Programs in Economic Development Strategies*. Washington, DC: Northeast-Midwest Institute, 1979.
- Smith, G. *Employer-Sponsored Recurrent Education in the United States: A Report on Recent Inquiries into Its Structure*. Stanford, CA: Institute for Research on Educational Finance and Governance, Stanford University, November 1980. (ERIC Document Reproduction Service No. ED 201 066)
- Smith, R. *The National Interest in Employment and Training*. Washington, DC: National Commission on Employment Policy, 1981.
- Stack, H., and Paskal, G. "The University Studies and Weekend College Program: Beyond Access." *New Directions for Experiential Learning*, no. 10 (1980): 17-18. (ERIC No. EJ 244 052)
- Types of Workers' Education Benefits*. Topic Paper no. 5. Washington, DC: Labor Education Advisory Services, 1982.
- Verderber, R. F., and Verderber, K. S. *Inter-Act: Using Interpersonal Communication Skills*. 2d ed. Belmont, CA: Wadsworth Publishing Co., 1980.
- Wenig, R., and Wolansky, W. *Employer-Sponsored Skill Training*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.
- Wilson, J. "A Study of the Relationship between Postsecondary Education and Economic Development in Selected States." Phoenix: Arizona Commission for Postsecondary Education, 1981. (ERIC Document Reproduction Service No. ED 215 649)

Developing Curriculum in Response to Change

- AFL-CIO Committee on the Evolution of Work. *The Future of Work*. Washington, DC: AFL-CIO, 1983.
- American Council of Life Insurance. *The Changing Nature of Work*. Trend Analysis Report 17. Washington, DC: American Council of Life Insurance, 1978.
- Anderson, J. "Population Change and the American Labor Market: 1950-2000." In *Consequences of Changing U.S. Population: Baby Boom and Bust*, Vol. 11. Hearings before the Select Committee on Population, 95th Congress. Washington, DC: Government Printing Office, 1978.
- Aslanian, C. B., and Brickell, H. M. *Americans in Transition: Life Changes as Reasons for Adult Learning*. New York: Future Directions for a Learning Society, College Entrance Examination Board, 1980. (ERIC Document Reproduction Service No. ED 195 687).
- Baruch, G.; Barnett, R.; and Rivers, C. *Lifeprints*. New York: McGraw-Hill, 1983.
- Barton, P. "Adult Career Guidance: Emergency of Need." In *Perspectives on Adult Career Development and Guidance*. Research and Development Series no. 181, compiled by R. Campbell and P. Shaltry. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1980. (ERIC Document Reproduction Service No. ED 189 290).
- Beder, H. "Reaching the Hard-to-Reach Adult through Effective Marketing." In *Reaching Hard-to-Reach Adults*, edited by G. Darkenwald and G. Larson. San Francisco: Jossey-Bass, 1980. (ERIC No. EJ 235 868).
- Bottoms, G. "Vocational Education Looks to the Future." *VocEd* 56 (January/February 1981): 10-11.
- Brewer, N. B. "Life Skills and the Adult Learner." *School Shop* 40 (April 1980): 54-55.
- Brookfield, S. *Adult Learners, Adult Education and the Community*. New York: Teachers College Press, 1984.
- Buckholtz, M. W. "Keeping Up with a Revolution." *American Education* 17 (November 1981): 10-14. (ERIC No. EJ 255 961).
- Bylinsky, G. "A New Industrial Revolution Is On the Way." *Fortune* (5 October 1981): 106-114.
- The CAD/CAM Handbook*. Edited by C. Machover and R. E. Blauth. Bedford, MA: Computervision Corporation, 1980.
- Carnevale, A. P. *Human Capital: A High Yield Corporate Investment*. Washington, DC: American Society for Training and Development, 1982.

- Carnevale, A. P., and Goldstein, H. *Employee Training: Its Changing Role and Analysis of New Data*. Washington, DC: American Society for Training and Development, 1983.
- Center for Occupational Research and Development. "Innovative Delivery Systems." In *High Technology Vocational Programs: Resource Guide*, pp. 133-148. Waco, TX: CORD, 1983.
- Chickering, A., ed. *The Modern American College*. San Francisco: Jossey-Bass, 1981.
- Chiriboga, D. A. "An Examination of Life Events as Possible Antecedents to Change." *Journal of Gerontology* 37 (September 1982): 595-601. (ERIC No. EJ 268 059).
- Choate, P. *Retooling the American Work Force: Toward a National Training Strategy*. Washington, DC: Northeast-Midwest Institute, 1982.
- Clark, D. M., and Rinehart, R. L. *Structures and Strategies for Linking the Higher Education and Employment Communities*. Washington, DC: American Council on Higher Education, 1982.
- Coates, J. F. "The Changing Nature of Work," *VocEd* 57, no. 1 (January-February 1982): 27.
- Cockroft, D. "New Office Technology and Employment." *International Labour Review* 119 (1980): 689-704.
- Cohen-Rosenthal, E. "Enriching Workers' Lives." *Change* 11 (July-August 1979): 64-65. (ERIC No. EJ 206 710).
- The College Board. *Academic Preparation for College: What Students Need to Know and Be Able to Do*. New York: The College Board, 1983.
- Cross, K. "Adult Learners: Characteristics, Needs, and Interests." In *Lifelong Education in America*, by Richard E. Peterson and Associates. San Francisco, CA: Jossey-Bass, 1982.
- Cross, K. P. *Adults as Learners*. San Francisco: Jossey-Bass, 1981.
- Darkenwald, G. G., and Knox, A. B., eds. *Meeting Educational Needs of Young Adults: New Directions for Continuing Education*. No. 21 San Francisco: Jossey-Bass, 1984.
- Darkenwald, G., and Merriam, S. *Adult Education: Foundations of Practice*. New York: Harper and Row, 1982.
- DeVore, P. W. "Technology, Society and Education." *Thresholds in Education* 9, no. 2 (May 1983): 2-8.
- DeVore, P. W. *Technology: An Introduction*. Worcester, MA: Davis Publications, 1980.
- Donahue, T. R. "The Human Factor in Productivity." *The AFL-CIO American Federationist* 87 (1980): 13-15.

- Education Commission of the States. *Action for Excellence*. Denver, CO: Education Commission of the States, Task Force on Education for Economic Growth, 1983.
- Ellul, J. *The Technological System*. New York: Continuum, 1980.
- "Employers, Not Schools, Furnish Most Job Training." *Manpower and Vocational Education Weekly* 23 (June 1983): 1.
- Franklin, W. H., Jr. "Why Training Fails." *Administrative Management* (1981): 42-43, 72-74.
- Fraser, B. S. *The Structure of Adult Learning, Education and Training Opportunity in the United States*. Washington, DC: National Institute for Work and Learning, 1980.
- Gilchrist, B., and Shenkin, A. "Disappearing Jobs: The Impact of Computers on Employment." *The Futurist* 15 (1981): 44-49.
- Gomberg, W. "Education and Leisure: New Curricula." *Change* 11 (July-August 1979): 30-34. (ERIC No. EJ 206 702).
- Green, R. E., and Enderline, M. A. "A New Bottle for Good Wine: Assessing the Unmet Needs and Wishes of Older Adults." *Lifelong Learning: The Adult Years* 4 (October 1980): 12-15, 31. (ERIC No. EJ 233 601).
- Guba, E. G., and Lincoln, Y. S. *Effective Evaluation*. San Francisco: Jossey-Bass, 1982.
- Hamilton, J. A. *Adapting Vocational Education to the 80's through Human Resource Development*. Palo Alto, CA: American Institutes for Research in the Behavioral Sciences, 1982. (ERIC Document Reproduction Service No. ED 215 116).
- Harman, D. *Functional Illiteracy in the United States: Issues, Experiences, and Dilemmas*. Washington, DC: National Adult Literacy Project, National Institute of Education, 1984.
- Hultsch, D. F., and Deutsch, F. *Adult Development and Aging: A Life-Span Perspective*. New York: McGraw-Hill, 1981.
- Hunter, C., and Harman, D. *Adult Illiteracy in the United States*. Revised. New York: McGraw-Hill, 1985.
- Iowa Career Education Division. *Guidelines for Area Planning Councils*. Des Moines. Iowa Department of Public Instruction, 1983.
- Kasworm, C. *Competency-Based Adult Education: A Challenge of the 80s*. Columbus: The EFC Clearinghouse on Adult, Career, and Vocational Education. The Ohio State University, 1980. (ERIC Document Reproduction Service No. ED 193 528).
- Kinnucan, P. "Computer-Aided Manufacturing Aims for Integration." *High Technology* (May-June 1982): 49-56.

- Knox, A. B., ed. *Programming for Adults Facing Mid-Life Change: New Directions for Continuing Education*. No. 2. San Francisco: Jossey-Bass, 1979.
- Knox, A. B. *Adult Development and Learning*. San Francisco: Jossey-Bass, 1977.
- Knowles, M. *The Modern Practice of Adult Education*. Rev. ed. Chicago: Association Press/Follett. 1980.
- Krupp, J. *The Adult Learner*. Manchester, CT: Adult Development and Learning, 1982.
- Lasker, H. M., and Moore, J. F. "Current Studies of Adult Development: Implications for Education." In *Adult Development and Approaches to Learning*, by H. M. Lasker, J. F. Moore, and E. Simpson. Washington, DC: National Institute for Community Development, 1980. (ERIC Document Reproduction Service No. ED 195 854).
- Ledesma, R. "Training for Productivity." *Computer Graphics World* (November 1981).
- Lewis, M. V.; Fraser, J. L.; and Unger, P. V. *Anticipating Future Influences on Vocational Education*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- Madaus, G. F.; Scriven, J.; and Stufflebeam, D. L. *Evaluation Models: Viewpoints on Educational and Human Services Evaluation*. Boston: Kluwer-Nijhoff Publishing, 1983.
- Maxwell, G. W., and West, L. *Handbook for Developing Competency Based Curricula for New and Emerging Occupations*. San Jose, CA: San Jose State University, 1980.
- Molitor, G. T. T. "The Information Society: The Path to Post-Industrial Growth." *The Futurist* 15 (April 1981): 13-30.
- Murphy, G. "The Community College as a Resource for Older Adults: A Working Model." *Lifelong Learning: The Adult Years* 3 (April 1980): 4-6. (ERIC No. EJ 244 825).
- Naisbitt, J. *Megatrends: Ten New Directions Transforming Our Lives*. New York: Warner Books, 1982.
- National Center for Education Statistics. *Participation in Adult Education, 1981*. Washington, DC: NCES, 1982.
- National Research Council. *International Competition in Advanced Technology: Decisions for America*. Washington, DC: National Academy Press, 1983.
- National Research Council, Commission on Behavioral and Social Sciences and Education, Committee on Vocational Education and Economic Development in Depressed Areas. *Education for Tomorrow's Jobs*. Edited by S. W. Sherman. Washington, DC: National Academic Press, 1983.
- Norman, C. "The New Industrial Revolution: How Microelectronics May Change the Workplace." *The Futurist* 15 (1981): 30-42.

- Odiorne, G. S. "Training to Be Ready for the 90s." *Training and Development Journal* 34 (1980): 12-20.
- Ckun, M. A., ed. *Programs for Older Adults: New Directions for Continuing Education*, no. 14. San Francisco: Jossey-Bass, 1982.
- Orth, M. N., and Russell, J. F. *Curriculum Development Needs for Vocational Education: New and Changing Occupations*. Columbus: National Center for Research in Vocational Education, The Ohio State University, 1980.
- Osborne, A. *Running Wild: The Next Industrial Revolution*. Berkeley, CA: Osborne/McGraw-Hill, 1979.
- Pannell, P. F. "Do Schools Adjust to Changing Job Demands?" *Thrust, the Journal for Employment and Training Professionals* 2 (1980): 105-123.
- Patton, M. Q. *Qualitative Evaluation Methods*. Beverly Hills, CA: Sage Publications, 1980.
- Pedrotti, L. S. "Redesigning Vo-Tech Curricula." In *High Technology Vocational Programs*, pp. 21-82. Waco, TX: Center for Occupational Research and Development, 1983.
- Peterson, R. E., and Associates. *Lifelong Learning in America*. San Francisco: Jossey-Bass, 1982.
- Platt, J. "The Greatest Evolutionary Jump in History." In *Through the '80s: Thinking Globally, Acting Locally*, edited by F. Feather, pp. 12-15. Washington, DC: World Future Society, 1980.
- Pratzner, F. C. "Look Before You Leap Aboard the Industry/Education Bandwagon." *Journal of the American Vocational Association* (1983): 17-20.
- Pryor, D. "Training in the Corporate World: Juggling, Educating, and Jungle Fighting." *Training and Development Journal* (1983): 17-20.
- Schlossberg, N. *Counseling Adults in Transition*. New York: Springer Publishing Co., 1984.
- Schmelter, H. B. *Linking the Worker to Postsecondary Education: A Manual for Training Study Organizers in America*. New York: College Entrance Examination Board, 1980. (ERIC Document Reproduction Service No. ED 191 416).
- Sherman, S., ed. *Education for Tomorrow's Jobs*. Washington, DC: National Academy of Science, September 1983.
- Sinnett, W. E. *The Applications of DACUM in Retraining and Post-Secondary Curriculum Development*. 2nd rev. ed. Toronto: Humber College of Applied Arts and Technology, 1976.

- Staerckel, W. M. "Increasing the Individual's 'Cope-ability'." *Community and Junior College Journal* 50 (1980): 46-51.
- Stewart, C. D. *Worklife Education and Training and the Ordeal of Change*. Washington, DC: National Institute for Work and Learning, 1980.
- Streit, L. D. "Job Competencies for Six Settings. What Skills Do Educational Technologists Need for Job Mobility?" *Instructional Innovator* 26 (1981): 27-28.
- The Techno/Peasant Survival Manual (The Book that De-Mystifies the Technology of the 80s)*. New York: Bantam Books, 1980.
- Thurow, L. *The Zerosum Society*. New York: Basic Books, 1980.
- Toffler, A. *The Third Wave*. New York: William Morrow, 1980b.
- "Training for Large-Scale Job Displacement." *Training* 17 (1980): 6, 8, 15.
- Uhlig, R. P.; Farber, D. J.; and Bair, J. H. *The Office of the Future*. New York: North Holland Publishing Co., 1979.
- U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 1983*. Washington, DC: Government Printing Office, 1983.
- U.S. Department of Labor, Bureau of Labor Statistics. *Industrial Technology Outlook Reports*. Washington, DC: U.S. Government Printing Office. (Annual)
- Varney, G. H. "Productivity in the 80's--Are You Ready?" *Training and Development Journal* 13 (March 1981): 13-14.
- Wentling, T. L. *Evaluating Occupational Education and Training Programs*. 2nd ed. Boston: Allyn and Bacon, 1980.
- Whitelaw, W. "The Economy and The College Student." In *Current Issues in Higher Education* (1982-83), pp. 4-11. Washington, DC: American Association for Higher Education, 1983.
- Yarrington, R., ed. *Employee Training for Productivity: Report of a 1980 Assembly on Industry-Education Cooperation*. Washington, DC: American Association of Community and Junior Colleges, 1980. (ERIC Document Reproduction Service No. ED 190 188).

Special Services for Adult Learners

- Amundsen, N. E., and Borgen, W. "The Dynamics of Unemployment: Job Loss and Job Search." *Personnel and Guidance Journal* 60 (1982): 562-564.
- Andrews, D. B., and Drier, H. N. *How to Fund Career Guidance Programs*. Worster, OH: Bell & Howell Company, Publication Systems Division, 1985.
- APA. *Standards for Educational and Psychological Testing*. Washington, DC: American Psychological Association, 1985.
- Arns, K. F. *New Directions for Community Colleges: Occupational Education Today*. San Francisco: Jossey-Bass, 1981.
- Backer, T. E. *Client Assessment: A Manual for Employment and Training Agencies*. Los Angeles: Edward Glaser and Associates, 1979.
- Bacon, M. "What Adult Literacy Teachers Need to Know about Strategies for Focusing on Comprehension." *Lifelong Learning: The Adult Years* 6 (February 1983): 4-5. (ERIC No. EJ 279 099).
- Baldwin, S. E., and Donohue, A. *Displaced Workers: New Options for a Changing Economy*. Washington, DC: National Commission for Employment Policy, February 1983.
- Baty, G. B. *Entrepreneurship for the Eighties*. Reston, VA: Reston Publishing Co., 1981.
- Bendick, M., Jr. *Workers Dislocated by Economic Change: Toward New Institutions for Mid-career Worker Transformation*. Washington, DC: The Urban Institute. February 1982.
- Bendick, M., Jr., and Egan, M. L. *Recycling America's Workers: Public and Private Approaches to Midcareer Retraining*. Washington, DC: The Urban Institute, April 1982.
- Berlin, G. *Not Working: Unskilled Youth and Displaced Adults*. New York: Ford Foundation. August 1983. (ERIC Document Reproduction Service No. ED 236 332).
- "BLS Reports on Displaced Workers." *News--U.S. Department of Labor* 84-492 (30 November 1984).
- Botterbusch, K. F. *A Comparison of Commercial Vocational Evaluation Systems*. Stout: Stout Vocational Rehabilitation Institute, University of Wisconsin-Stout, 1980.
- Brookfield, S. *Adult Learners, Adult Education and the Community*. New York: Teachers College Press, 1984.
- Bruyere, D.; Stevens, M. J.; and Pfof, F. S. "Career/Life Planning for Displaced Homemakers." *Journal of Employment Counseling* 21, no. 3 (September 1984) 126-135.

- Burtoff, M.; Crandall, J. A.; Moore, A. L.; and Woodcock, S. *From the Classroom to the Workplace: Teaching ESL to Adults*. Washington, DC: ERIC Clearinghouse on Languages and Linguistics, Center for Applied Linguistics, 1983. (ERIC Document Reproduction Service No. ED 227 694).
- Buskey, J. H., ed. *Attracting External Funds for Continuing Education*. New Directions for Continuing Education, no. 12. San Francisco: Jossey-Bass, 1981.
- California Adult Student Assessment System (CASAS). *Users Guide for Vocational Assessment Instruments for Youth and Adults*. San Diego: CASAS, 1984.
- Cartwright, G. P.; Cartwright, C. A.; and Ward, M. *Educating Special Learners*. Belmont, CA: Wadsworth Publishing, 1981.
- Center for Applied Linguistics. *A Guide for Employers of Refugees*. Washington, DC: Center for Applied Linguistics, 1982. (ERIC Document Reproduction Service No. ED 219 957).
- Cetron, M., and O'Toole, T. *Encounters With the Future: A Forecast of Life Into the 21st Century*. New York: McGraw-Hill, 1982.
- Changes in the Global Economy: Strategies for the 1990s*. Washington, DC: The Center for Strategic and International Studies Georgetown University, 1983.
- Crites, J. O. *Career Counseling: Models, Methods, and Materials*. New York: McGraw-Hill, 1981.
- Curtin, R. T. *Running Your Own Show: Mastering the Basics of Small Business*. New York: John Wiley & Sons, 1982.
- Darkenwald, G. G., and Merriam, S. B. *Adult Education: Foundations of Practice*. New York: Harper & Row, 1982.
- Davis, E. L., and Zelinko, M. A. *Entrepreneurship in Voc Ed: A Guide for Program Planners*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1981.
- Diehl, W. A., and Mikulecky, L. "The Nature of Reading at Work." *Journal of Reading* 24 (December 1980): 221-227. (ERIC No. EJ 236 480).
- Drewes, D. V., and Nerden, J. T. *Identification of Issues Relating to the Role of Vocational Education in Serving Older Persons. Final Report*. Raleigh, NC: CONSERVA, Inc., 1981. (ERIC Document Reproduction Service No. ED 204 598).
- Eberle, A., and Robinson, S. *The Adult Illiterate Speaks Out: Personal Perspectives on Learning to Read and Write*. Washington, DC: National Institute for Community Development, 1980. (ERIC Document Reproduction Service No. ED 195 771).

- Employment and Training of Ex-Offenders: A Community Program Approach*. Washington, DC: Administrative Office of the United States Courts. Division of Probation and the National Alliance of Business, 1983. (ERIC Document Reproduction Service No. ED 239 089).
- Ewert, D. M. "Involving Adult Learners in Program Planning." *New Directions for Continuing Education*, no. 15 (September 1982): 29-38. (ERIC No. EJ 266 709).
- Feldman, M. A.; Nicolau, M. E.; and Clelland, R. W. *Vocational Careers in Which a Language Other Than English Is an Asset*. Bethesda, MD: Miranda and Associates, 1982. (ERIC Document Reproduction Service No. ED 227 241).
- Fitzgerald, G. G. "Can the Hard-to-Reach Adults Become Literate?" *Lifelong Learning: An Omnibus of Practice and Research* 7 (February 1984): 4-5, 27. (ERIC No. EJ 294 399).
- Furdell, P. *Economic Dislocations: What Can Be Done: Suggested Readings in Plant Closings, Strategies for Affected Communities, Retraining and Related Issues*. Washington, DC: National Alliance of Business, 1982.
- The Future of Older Workers in America*. Scarsdale, NY: Work in American Institute, 1980. (ERIC Document Reproduction Service No. ED 193 480).
- Garner, G. O., and Shutte, P. J. *Capacity Building for Employment and Training: Career Guidance, Counseling, and Information Services, A Self-Assessment and Technical Assistance Manual*. Washington, DC: National Vocational Guidance Association, 1981.
- Harris-Bowlsbey, J. H. "The Computer as a Tool in Career Guidance Programs." In *Designing Careers*, edited by Norman C. Gysbers, pp. 362-383. San Francisco: Jossey-Bass, 1984.
- Harris, E. E. *Strategies for Maximizing the Contributions of Small Business and Entrepreneurship to Economic Development*. Springfield: Illinois Development Council, 1985.
- Havenson, W., and Haynes, J. L. *ESL/Literacy for Adult Learners*. Language in Education: Theory and Practice, No. 49. Washington, DC: ERIC Clearinghouse on Languages and Linguistics, Center for Applied Linguistics, 1982. (ERIC Document Reproduction Service No. ED 217 703).
- Heathington, B. S., and Koskinen, P. S. "Interest Inventory for Adult Beginning Readers." *Journal of Reading* 26 (December 1982): 252-256. (ERIC No. EJ 271 139).
- Henry, J. F., and Raymond, S. *Basic Skills in the U. S. Work Force*. New York: Center for Public Resources, 1982.
- Heppner, M. J., and Johnston, J. A. "Computerized Career Guidance and Information Systems: Guidelines for Selection." *Journal of College Student Personnel* 26, no. 2 (March 1985): 156-163.

- Herr, E. L., and Cramer, S. H. *Career Guidance and Counseling Through the Life Span: Systematic Approaches*. 2nd ed. Boston: Little, Brown & Company, 1984.
- Hiemstra, R. *Preparing Human Service Practitioners to Teach Older Adults*. Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education, The National Center for Research in Vocational Education, 1980. (ERIC Document Reproduction Service No. ED 193 529).
- Hill, S.; Kroliczak, A.; and Froomkin, J. *Characteristics of Postsecondary Students with Non-English Backgrounds*. Washington, DC: National Center for Education Statistics, 1982.
- Hodgetts, R. M. *Effective Small Business Management*. New York: Academic Press, 1982.
- Hoffman, L. M. G. "ABE Reading Instructions: Give Them Something to Read." *Community College Review* 8 (Summer 1980): 32-37. (ERIC No. EJ 237 106).
- Hunt, M., and Munro, C. *Life Skills for Women in Transition*. Newton, MA: Women's Educational Equity Act Publishing Center, 1982.
- Hurst, J. B., and Shepard, J. W. "Counseling Dislocated Workers in Job Training Placement Act Title III Programs." *The Vocational Guidance Quarterly* 34, no. 1 (September 1985): 47-52.
- Hutt, R. W. *Creating a New Enterprise*. Cincinnati: South-Western Publishing Co., 1982.
- InterAmerica Research Association. *Improving Techniques in Teaching English on the Job*. Rosslyn, VA: National Clearinghouse for Bilingual Education, 1982.
- Johnson, M. *The State of the Art in Job Search Training*. Salt Lake City, UT: Olympus Research Centers, 1982.
- Jones, E. V. *Reading Instruction for the Adult Illiterate*. Chicago: American Library Association, 1981. (ERIC Document Reproduction Service No. ED 211 943).
- Justis, R. T. *Managing Your Small Business*. Englewood Cliffs, NJ: Prentice-Hall, 1981.
- Kapes, J. T., and Mastie, M. M., eds. *A Counselor's Guide to Vocational Guidance Instruments*. Falls Church, VA: American Personnel and Guidance Association, 1982.
- Kapes, J. T., and Parrish, L. H. "Career Guidance and Assessment Tools for Handicapped Persons." In *Measurement Trends in Career and Vocational Education*, edited by Ronald C. Rogers, pp. 47-62. San Francisco: Jossey-Bass, 1983.
- Kasworm, C., and Stedmar, K. C. *Director's Guide to Recruiting Older Adults*. Austin, TX: University of Texas, 1981. (ERIC Document Reproduction Service No. ED 211 835).

- Kent, C. A.; Sexton, D. L.; and Vesper, K. H., eds. *Encyclopedia of Entrepreneurship*. Englewood Cliffs, NJ: Prentice-Hall, 1982.
- Kinnear, R. T., and Krumboltz, J. D. "Procedures for Successful Career Counseling." In *Designing Careers*, edited by Norman C. Gysbers, pp. 307-335. San Francisco: Jossey-Bass, 1984.
- Kremer, N., and Savage, K., eds. *Approaches to Employment Related Training for Adults Who Are Limited-English Proficient*. Burlingame, CA: Association of California School Administrators, 1985.
- Kuriloff, A. H., and Hemphill, J. J., Jr. *How to Start Your Own Business . . . and Succeed*. Rev. ed. New York: McGraw-Hill Book Co., 1981.
- Langerman, P. D.; Byerly, R. L.; and Root, K. A. *Plant Closings and Layoffs: Problems Facing Urban and Rural Communities*. Des Moines, IA: College for Continuing Education, Drake University, 1982.
- Lawson, V. K. *Thinking Is a Basic Skill: Creating Humanities Materials for the Adult New Reader*. Syracuse, NY: Literacy Volunteers of America, 1981. (ERIC Document Reproduction Service No. ED 213 822).
- Levine, K. "Functional Literacy: Fond Illusions and False Economies." *Harvard Educational Review* 52 (August 1982): 249-266. (ERIC No. EJ 267 893).
- Luttrell, W. "Understanding the Nature of Working Class Learners: A Challenge for Adult Education." In *Lifelong Learning Research Conference Proceedings*, edited by G. Whaples and W. Rivera. College Park: Department of Agricultural and Extension Education, University of Maryland, 1983. (ERIC Document Reproduction Service No. ED 226 228).
- MacDonald, R.; Troika, R.; Galvan, M.; McCray, A.; Shaefer, L.; and Stupp, P. *Improving Techniques in Teaching English for the Job*. Rosslyn, VA: InterAmerica Research Associates; Arlington, VA: National Clearinghouse for Bilingual Education, 1982. (ERIC Document Reproduction Service No. ED 217 709).
- Mikulecky, L. "Job Literacy: The Relationship between School Preparation and Workplace Actuality." *Reading Research Quarterly* 17 (1982): 400-419. (ERIC No. EJ 261 432).
- National Commission for Employment Policy. *Hispanics and Jobs: Barriers to Progress*. Washington, DC: National Commission for Employment Policy, 1982.
- National Federation of Independent Business. *Small Business in America*. San Mateo, CA: NFIB Research & Education Foundation, 1981.
- Newman, A. P. *Adult Basic Education: Reading*. Boston: Allyn and Bacon, 1980.
- O'Brien, R. L., comp. *Books for Adult New Readers: A Bibliography Developed by Project: LEARN*. Rev. ed. Cleveland, OH: Project: LEARN, 1982. (ERIC Document Reproduction Service No. ED 224 878).

- Osipow, S. H. *Theories of Career Development*. 3d ed. Englewood Cliffs, NJ: Prentice-Hall, 1983.
- Peterson, R. E.; Helmick, J. S.; Valley, J. R.; Gaff, S. S.; Feldmesser, K. A.; and Nielsen, H. D. *Adult Education and Training in Industrialized Countries*. New York: Praeger, 1982.
- Phelps, L. A. *Limited English Proficiency in Vocational Education: A Handbook for Vocational Educators*. Champaign: University of Illinois, 1982.
- Pryor, R. G. L., and Ward, R. T. "Unemployment: What Counselors Can Do About It." *Journal of Employment Counseling* 22, no. 1 (March 1985): 3-17.
- Rhine, S. H. *America's Aging Population: Issues Facing Business and Society*. New York: The Conference Board, 1980.
- Rossmann, M. H.; Fisk, E. C.; and Roehl, J. E. *Teaching and Learning Basic Skills: A Guide for Adult Basic Education and Developmental Education Programs*. New York: Teachers College Press, 1984.
- Rothstein, F. R. *Innovative JTPA Training Approaches for Hard-to-Serve Adults*. Washington, DC: National Alliance of Business, January 1985.
- Rumberger, R. W. "The Growing Imbalance between Education and Work." *Phi Delta Kappan* 65 (January 1984): 342-346. (ERIC No. EJ 291 512).
- Salkin, M., and Britton, M. D. *Education and Training for Older Persons: A State of the Art Summary Report*. Washington, DC: Office of Education, U.S. Department of Health, Education and Welfare, 1980. (ERIC Document Reproduction Service No. ED 204 597).
- Sampson, J. P., Jr.; McMahon, B. T.; and Burkhead, E. J. "Using Computers for Career Exploration and Decision Making in Vocational Rehabilitation." *Rehabilitation Counseling Bulletin* 28, no. 4 (June 1985): 242-261.
- Sampson, J. P., Jr.; Shahnasarian, M.; and Maddox, E. N. *Implementing Computer Assisted Career Guidance Systems and Other Computer Applications for the Adult Learner*. Ann Arbor, MI: ERIC Clearinghouse on Counseling and Personnel Services, 1984.
- Schlorsberg, N. K. *Counseling Adults in Transition: Linking Practice with Theory*. New York: Springer Publishing Company, 1984.
- Scribner, S., and Cole, M. *The Psychology of Literacy*. Cambridge, MA: Harvard University Press, 1981.
- Seigel, D., and Goldman, H. L. *Successful Small Business Management*. New York: Fairchild Books, 1982.

- Shifron, R.; Dye, A.; and Shifron, G. "Implications for Counseling the Unemployed in a Recessionary Economy." *Personnel and Guidance Journal* 61 (1983): 527-529.
- Shore, J. A. *Alternative Work Patterns: Implications for Worklife Education and Training*. Worker Education and Training Policies Project. Washington, DC: National Institute of Work and Learning, 1980. (ERIC Document Reproduction Service No. ED 200 734).
- Short, C., and Levine, J. *The Neglected Resource: the Use of Employment and Training Programs in Economic Development Strategies*. Washington, DC: Northeast-Midwest Institute, September 1982.
- Siropolis, N. C. *Small Business Management: A Guide to Entrepreneurship*. 2d ed. Boston: Houghton Mifflin, 1982.
- Small Business Incubators Resource Summary*. Chicago: U.S. Small Business Administration, 1984.
- Stegall, S.; Steinmetz, L.; and Kline, J. *Managing the Small Business*. 3d ed. Homewood, IL: Richard D. Irwin, 1982.
- Steinhoff, D. *Small Business Management Fundamentals*. 3d ed. New York: McGraw-Hill Book Co., 1982.
- Stiggins, C. *An Analysis of the Dimensions and Testing of Job Related Reading*. Portland, OR: Northwest Regional Educational Laboratory, 1981.
- Swanson, R. A., and Murphy, B. P. "The Growing Trend of Industry and Business Training." In *Contemporary Challenges for Vocational Education*, edited by K. B. Greenwood. Arlington, VA: The American Vocational Association, 1981. (ERIC Document Reproduction Service No. ED 212 889).
- Swirsky, J., and Vandergoot, D. *A Handbook of Placement Resources*. Albertson, NY: Human Resources Center, 1980.
- Taggart, R. *A Fisherman's Guide--An Assessment of Training and Remediation Strategies*. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research, 1981. (ERIC Document Reproduction Service No. ED 212 764).
- Thistlethwaite, L. "Teaching Reading to the ABE Student Who Cannot Read." *Lifelong Learning: An Omnibus of Practice and Research* 7 (September 1983): 5-7, 28. (ERIC No. EJ 285 001).
- Thomas, K. R., and Berven, N. I. "Providing Career Counseling for Individuals with Handicapping Conditions." In *Designing Careers*, edited by Norman Gysbers, pp. 403-432. San Francisco: Jossey-Bass, 1984.
- Tyler, L. E. "What Tests Don't Measure." *Journal of Counseling and Development* 63, no. 1 (September 1984): 48-50.

- Vacc, N. "Computers in Adult Education." *Lifelong Learning: An Omnibus of Practice and Research* 7 (April 1984): 26-28.
- Vaut, E. D. *ESL/Coping Skills for Adult Learners*. Language in Education: Theory and Practice, no. 46. Washington, DC: ERIC Clearinghouse on Languages and Linguistics, Center for Applied Linguistics, 1982. (ERIC Document Reproduction Service No. ED 217 700).
- Walz, G. R., and Benjamin, L. "A Systems Approach to Career Guidance." *The Vocational Guidance Quarterly* 33, no. 1 (September 1984): 26-34.
- Weaver, P. *Strategies for the Second Half of Life*. New York: Franklin Watts, 1980.
- Wentling, T. *Evaluating Occupational Education and Training Programs*. 2d ed. Urbana, IL: Griffin Press, 1980.
- Wexley, K. N., and Latham, G. P. *Developing and Training Human Resources in Organization*. Glenview, IL: Scott Foresman, 1981.
- Wiberg, M. M., and Mayor, M. "The Special Needs of Women Students: Support Services that Help Women Succeed." *Vocational Education Journal* 60, no. 7 (October 1985): 33-35.

OPTIONS ORDER FORM

BILL AS LISTED BELOW

- ☐ Bill Me
- ☐ Bill My Agency/Organization on
Purchase Order No. _____
- ☐ Purchase Order Enclosed
- ☐ Confirming P.O. to Follow

REMITTANCE

- ☐ \$ _____ U.S. enclosed CK No. _____
(payable to the National Center for Research
in Vocational Education)
- ☐ Payable on receipt of invoice

BILL TO:

Agency _____

Name/Title _____

Street Address _____

City _____ State _____ Zip _____

CHARGE TO MY CREDIT CARD ☐ ☐

Expiration Date _____
Credit Card Number _____ mo. yr

Name on Card (Print or Type) _____ \$ _____ U.S.
Amount

Authorized Signature _____ Date _____
()

Telephone Number _____

• Agreeing to pay the sum, set forth to the bank which issued
the card in accordance with the terms of the credit card.

SHIP TO:

Agency _____

Name/Title _____

Street Address _____

City _____ State _____ Zip _____

Order
Authorized by _____
Signature _____ Date _____

**Office Use
Only**

Date _____
Authorization _____

Order No.	Title	Unit Price	Quantity Ordered	Extended Price
SP500	OPTIONS: Expanding Educational Services for Adults (complete set)	\$174.00		
SP500A	The Educator's Guide	5.25		
SP500B	Orientation to Options (videocassette—VHS)	25.00		
SP500C	Publicity Kit	29.95		
SP500D	Linking with Employers	39.95		
SP500E	Developing a Curriculum in Response to Change	39.95		
SP500F	Special Services for Adult Learners (includes)	29.50		
SP500FA	Adult Career Guidance	12.95		
SP500FB	Literacy Enhancement	9.50		
SP500FC	Entrepreneurship Education	9.50		
SP500G	Case Studies of Programs Serving Adults	39.95		

NOTE: Complete package price of \$174.00 represents a 15% + discount of total individual product prices.

Sub Total \$ _____
(less _____ % discount
as applicable) Minus _____

Total \$ _____



The Ohio State University